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| 08/901,687 | 07/28/97 | PETTITT | JAS-545P |

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LM02/1223

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| ART UNIT | PAPER NUMBER |
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2765

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DATE MAILED: 12/23/98

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
08/901,687

Applicant(s)
John Philip Pettitt

Examiner
John Campa

Group Art Unit
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☒ Responsive to communication(s) filed on the application filed on 7/28/97.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-16 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-16 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☒ The drawing(s) filed on Jul 28, 1997 is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 3

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

1. Claims 1-16 have been examined.

Drawings

2. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.
3. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).
4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

Page 4, line 16, reference 106 is not included in Figure 3.

Page 4, line 22, reference 208 is not included in Figure 3.

Page 6, line 18, reference 224 is not included in Figure 3.

Page 6, line 18, reference 302 is not included in Figure 4.

Page 6, line 20, reference 304 is not included in Figure 4.

Page 6, line 21, reference 306 is not included in Figure 4.

Correction is required.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 200. Correction is required.

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6. The drawings are objected to because on page 6, line 3, reference 204 apparently is being described as the "AVS system." In addition, lines, numbers and letters are not uniformly thick and well defined, clean, durable and black (poor line quality). Further, the margins are not acceptable. See Figures 1-4. Correction is required.

7. For purposes of clarity, examiner suggests the following change to the drawings:

In Figure 4, label reference sign 200 as "IVS" and perhaps enclose the drawn components within a block.

Specification

8. The specification is replete with grammatical errors too numerous to mention specifically. The specification should be revised carefully. Examples of such errors are:

"The verification procedure typically includes in the AVS system address information and Identity information." See page 1, lines 17 - 19. The proper noun "internet," found throughout the specification and claims is not capitalized. "[T]he address and identity information is not enough **for** to adequately verify . . ." See page 1, line 20 (emphasis added). "[A] typical verification systems . . ." See page 2, line 7 (emphasis added). "[C]redit card transaction between consumer and a merchant . . ." See page 2, line 15. No reference number listed for "[t]he internet ID verification system . . ." and "history check . . ." See page 5, lines 13 - 14. Further, the preceding examples are not exhaustive as there are a variety of other grammatical errors including but not limited to improper punctuation and split infinitives.

Appropriate correction is required.

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Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-16 are rejected under 35 U.S.C. 102(b) based upon a public use or sale of the invention.

The prior art reference titled "CyberSource IVSTM" found on the Internet at http://www.cybersource.com/html/solutions/fraud_main.html#overview describes the newest release of "CyberSource IVSTM," marketed as version 3.0 by CyberSource, which examiner believes to be fundamentally the same product as the first released version which was developed by CyberSource from 1995 through 1996. See "Qualcomm, Insignia, Wall Data and seven other publishers choose CyberSource to distribute products via the Internet," PRNewswire, San Jose, California, April 30, 1996. Thus, examiner asserts that "CyberSource IVSTM" describes the instant invention and that it was originally put into use more than one year prior to the filing of the instant application on July 28, 1997.

As per claim 1, "CyberSource IVSTM" describes a method for detecting fraud in a credit card transaction between a consumer and a merchant over the Internet comprising the steps of: verifying the consumer's credit card information based upon a plurality of information (Under "How IVS Works" heading, your CyberSource IVS technology analyzes numerous characteristics of an Internet credit card transaction in order to determine whether the instant transaction is

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fraudulent); weighting the parameters so as to provide a merchant with a quantifiable indication of whether the credit card transaction is fraudulent (Under “How IVS Works” heading, your CyberSource IVS technology analyzes numerous characteristics of a transaction, including such variables as time of day or night, network address, geographic location, etc., and assigns each characteristic a weighted score in order to assign an overall risk score).

“CyberSource IVSTM” does not explicitly state the step of obtaining the consumer’s credit card information for a transaction. However, this step is deemed to be inherent to the “CyberSource IVSTM” system since it would be inoperative if it did not somehow collect the necessary information from a consumer before it attempted to effect a purchase and sale.

As per claim 2, “CyberSource IVSTM” describes a method for detecting fraud in a credit card transaction between a consumer and a merchant over the Internet wherein the plurality of parameters includes:

a consistency check parameter which is used to determine whether the credit information is consistent (Under “Understanding the Difference Between IVS and Other Methods” heading, an AVS will attempt to verify whether a consumer’s delivery address information matches that of the credit card in a transaction); a history check parameter (Under “Compared to Other ‘Fraud Detection’ Systems” heading, your database which stores millions of recorded Internet transactions); an automatic verification system parameter (Under “Understanding the Difference Between IVS and Other Methods” heading, traditional risk detection methods such as AVS; also, designated as prior art in the specification, page 3, lines 2-3); an Internet identification system

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parameter (Under “Compared to Other ‘Fraud Detection’ Systems” heading, your database which stores millions of recorded Internet transactions).

As per claim 3, “CyberSource IVSTM” describes a method for detecting fraud in a credit card transaction between a consumer and a merchant over the Internet wherein the history check includes:

a database that can be accessed by other merchants (Under “Compared to Other ‘Fraud Detection’ Systems” heading, your shared history database); a database that can be supplemented by other merchants (Under “Compared to Other ‘Fraud Detection’ Systems” heading, your shared history database).

As per claim 4, “CyberSource IVSTM” describes a method for detecting fraud in a credit card transaction between a consumer and a merchant over the Internet wherein the Internet identification verification system includes:

a database that can be accessed by other merchants (Under “Compared to Other ‘Fraud Detection’ Systems” heading, your shared database); a database that can be supplemented by other merchants (Under “Compared to Other ‘Fraud Detection’ Systems” heading, your shared database).

Claim 5 is written as a system and contains essentially the same limitations as claim 1, therefore the same rejection is applied.

Claim 6 is written as a system and contains essentially the same limitations as claim 1, therefore the same rejection is applied.

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Claim 7 is written as a system and contains essentially the same limitations as claim 2, therefore the same rejection is applied.

Claim 8 is written as a system and contains essentially the same limitations as claim 3, therefore the same rejection is applied.

Claim 9 is written as a system and contains essentially the same limitations as claim 4, therefore the same rejection is applied.

As per claim 10, "CyberSource IVSTM" describes a method for verifying the validity of a credit card transaction over the Internet comprising the steps of:
obtaining other transactions utilizing an Internet address that is identified with the credit card transaction (Under "How IVS Works" heading, your IVS cross-references information provided against other data to verify the identity of the cardholder); constructing a map of credit card numbers based upon the other transactions (Under "Compared to Other 'Fraud Detection' Systems" heading, your database which stores millions of recorded Internet transactions); utilizing mapped transactions to determine if the credit card transaction is valid (Under "How IVS Works" heading, your CyberSource IVS technology analyzes network addresses in order to determine whether the instant transaction is fraudulent).

Claim 11 is written as a system and contains essentially the same limitations as claim 1, therefore the same rejection is applied.

Claim 12 is written as a system and contains essentially the same limitations as claim 2, therefore the same rejection is applied.

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Claim 13 is written as a system and contains essentially the same limitations as claim 3, therefore the same rejection is applied.

Claim 14 is written as a system and contains essentially the same limitations as claim 4, therefore the same rejection is applied.

Claim 15 is written as a computer readable medium containing program instructions and contains essentially the same limitations as claim 1, therefore the same rejection is applied.

Claim 16 is written as a computer readable medium containing program instructions and contains essentially the same limitations as claim 10, therefore the same rejection is applied.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-9 and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rose, U.S. Patent No. 5,757,917 in view of Sandberg-Diment, U.S. Patent No. 5,826,245 and Tom, U.S. Patent No. 5,696,907.

As per claim 1, Rose teaches a method for enabling users on the Internet to conduct commercial transactions involving credit card payments comprising the step of:

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obtaining the consumer's credit card information for a transaction (see column 8, lines 1-3, after the buyer selects the goods or services that he wishes to purchase his credit card information is then sent to the merchant). Rose does not explicitly teach verifying the consumer's credit card information based upon a plurality of information. However, Sandberg-Diment teaches verifying the consumer's credit card information based upon a plurality of parameters (see column 3, lines 14-20, 37-41 and 55-56, a plurality of parameters including the consumer's name, address, credit card expiration date and identification of the consumer's credit card company are sent to his verification agent who then authenticates the credit card used in the transaction using the information supplied).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine Rose's method for enabling users on the Internet to conduct commercial transactions involving credit card payments with Sandberg-Diment's teachings of verifying the consumer's credit card information based upon a plurality of parameters because it is well known in the art that merchants wishing to protect themselves from credit card fraud ordinarily will perform (or cause to be performed) some type of verification procedure to ensure that a credit card presented for payment by a consumer in a transaction legitimately belongs to him. To verify that a credit card belongs to a consumer in a given transaction, it would be necessary to obtain certain information from him, i.e., a plurality of parameters, and analyze such information to determine whether the credit card does indeed belong to the consumer.

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Neither Rose or Sandberg-Diment teaches the step of weighting the parameters so as to provide a merchant with a quantifiable indication of whether the credit card transaction is fraudulent. However, Tom teaches weighting the parameters so as to provide a merchant with a quantifiable indication of whether the credit card transaction is fraudulent (see column 5, lines 24-57 and column 6, lines 43-46, a neural network is used to provide risk and credit evaluations of newly proposed financial service applications based upon a plurality of parameters which are weighted according to the information contained therein). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine Rose's teachings and Sandberg-Diment's teachings with Tom's teachings which shows weighting the parameters so as to provide a merchant with a quantifiable indication of whether the credit card transaction is fraudulent. In verifying a credit card transaction where a consumer provides certain information as taught by Rose and Sandberg-Diment, one having ordinary skill in the art would have been motivated by Tom to further assign risk factors or weights to each parameter since certain parameters may be more determinant than others towards detecting fraud. For example, a parameter containing the cardholder's mother's maiden name would most likely be weighted heavier than a parameter holding the cardholder's last purchase date. Thus, it would be advantageous for a system that detects fraud to place a greater emphasis on the accuracy of crucial data versus possible inaccuracies in less significant values.

As per claim 2, Neither Rose or Sandberg-Diment teaches a method for detecting fraud in a credit card transaction between a consumer and a merchant over the Internet wherein the

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plurality of parameters include: a consistency check parameter which is used to determine whether the credit card information is consistent, a history check parameter, an Internet identification system parameter, an Internet identification system parameter and an automatic verification system parameter. However, Tom teaches a method for detecting fraud in a credit card transaction between a consumer and a merchant over the Internet wherein the plurality of parameters includes: a consistency check parameter which is used to determine whether the credit card information is consistent (see figure 7, residence stability, employment stability and miscellaneous); a history check parameter (see figure 7, credit history); an Internet identification system parameter (see figure 7, residence stability). Tom fails to teach an automatic verification system parameter. However, official notice is taken that an automatic verification system is an old and well-known type of verification method used in credit card verifications. In addition, applicant admits that automatic verification systems are prior art. See specification, page 3, lines 2-3. It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine Rose's and Sandberg-Diment's teachings with Tom's teachings of a method for detecting fraud in a credit card transaction between a consumer and a merchant over the Internet wherein the plurality of parameters include: a consistency check parameter which is used to determine whether the credit card information is consistent, a history check parameter, an Internet identification system parameter, an Internet identification system parameter and the admitted prior art automatic verification system parameter because a merchant desiring to verify the information in connection with a credit card used in a transaction would like to assess certain

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data concerning the consumer such as his past transactions (history check parameter) to determine where the consumer has placed previous orders from in the past. In addition, a merchant might want to determine whether all the data entered during the transaction by the consumer is consistent, such as the consumer's address and telephone number information (consistency check parameter). One having ordinary skill in the art at the time the invention was made would be motivated further to include an Internet identification parameter because the instant invention is directed towards credit card transactions conducted on the Internet and a merchant wishing to prevent fraud would be inclined to track the Internet address that is being used with the credit card to track where else (other Internet addresses) that specific credit card has been used before. If a merchant determines that the credit card used in a transaction has been used on several different machines possessing different Internet addresses then a greater potential for fraud exists.

As per claim 3, official notice is taken that it is well known in the computer art to use: a database that can be accessed by other merchants and a database that can be supplemented by other merchants for the history check parameter. It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Rose, Sandberg-Diment, Tom and the admitted prior art that describe a method for detecting fraud in a credit card transaction between a consumer and a merchant over the Internet with a database that can be accessed by other merchants and a database that can be supplemented by other merchants for the history check parameter since most consumers buy products and services from more than one merchant and thus the only way for one merchant to detect fraud in a credit card transaction

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would be to have access to all of the past transaction history data available from other merchants concerning the specific credit card used in the transaction.

As per claim 4, official notice is taken that it is well known in the computer art to use: a database that can be accessed by other merchants and a database that can be supplemented by other merchants for the Internet identification system parameter. It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Rose, Sandberg-Diment, Tom and the admitted prior art that describe a method for detecting fraud in a credit card transaction between a consumer and a merchant over the Internet with a database that can be accessed by other merchants and a database that can be supplemented by other merchants for the Internet identification system parameter since most consumers buy products and services from more than one merchant and thus the only way for one merchant to detect fraud in a credit card transaction would be to have access to all of the past transaction data available from other merchants concerning the specific credit card used in the transaction and from where the credit card was being accessed from, i.e., the Internet address.

Claim 5 is written as a system and contains essentially the same limitations as claim 1, therefore the same rejection is applied.

Claim 6 is written as a system and contains essentially the same limitations as claim 1, therefore the same rejection is applied.

Claim 7 is written as a system and contains essentially the same limitations as claim 2, therefore the same rejection is applied.

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Claim 8 is written as a system and contains essentially the same limitations as claim 3, therefore the same rejection is applied.

Claim 9 is written as a system and contains essentially the same limitations as claim 4, therefore the same rejection is applied.

Claim 11 is written as a system and contains essentially the same limitations as claim 1, therefore the same rejection is applied.

Claim 12 is written as a system and contains essentially the same limitations as claim 2, therefore the same rejection is applied.

Claim 13 is written as a system and contains essentially the same limitations as claim 1, therefore the same rejection is applied

Claim 14 is written as a system and contains essentially the same limitations as claim 2, therefore the same rejection is applied

Claim 15 is written as a computer readable medium containing program instructions and contains essentially the same limitations as claim 1, therefore the same rejection is applied.

Conclusion

13. An issue of public use or on sale activity has been raised in this application. In order for the examiner to properly consider patentability of the claimed invention under 35 U.S.C. 102(b), additional information regarding this issue is required as follows: A manual, user's guide, advertisement or other literature which describes in detail "CyberSource IVSTM" version 1.0 (or

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the first version of this product). Further, any material which could show that the first version of "CyberSource IVS™" first marketed in 1996 differs substantially from the claimed invention or in fact was not in sale or use one year prior to the instant application's filing date of July 28, 1997 would be useful. Absent such information, examiner reasserts his contention that the claimed invention was in public use or on sale more than one year prior to the date of application. See ¶ 10 of this action.

Applicant is reminded that failure to fully respond to this requirement for information will result in a holding of abandonment.

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Weber, U.S. Patent No. 5,812,668, teaches an architecture for verifying the operation of a remote transaction clearance system which utilizes an address verification system (AVS).

- Wallner, U.S. Patent No. 5,696,909, teaches a virtual point of sale terminal which utilizes a merchant shared database.

- Gardner, U.S. Patent No. 5,758,327, teaches an electronic requisition and authorization process.

- Mandler, U.S. Patent No. 5,732,400, teaches a system and method for a risk-based purchase of goods.

- Nagata, U.S. Patent No. 4,594,663, teaches a credit transaction processing system.

- Bush, U.S. Patent No. 5,475,585, teaches a virtual transactional processing system.


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15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Campa whose telephone number is (703) 305-1382. The examiner can normally be reached Monday-Thursday from 8:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allen MacDonald, can be reached at (703) 305-9708.

The fax number for Formal or Official faxes to Technology Center 2700 is (703) 308-9051 or 9052. Draft or Informal faxes for this Art Unit can be submitted to (703) 308-5357.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.



ALLEN R. MACDONALD
SUPERVISORY PATENT EXAMINER